



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 HAWTHORNE STREET
SAN FRANCISCO, CALIFORNIA 94105**

ENFORCEMENT AND COMPLIANCE
ASSURANCE DIVISION

DATE: August 17, 2021

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
SA Recycling – Anaheim, Anaheim, California

FROM: Scott Connolly, Environmental Engineer
Air Section, Air, Waste & Analysis Branch,
Enforcement and Compliance Assurance Division

THRU: Janice Chan, Acting Manager
Air Section, Air, Waste & Analysis Branch,
Enforcement and Compliance Assurance Division

TO: File

BASIC INFORMATION

Facility Name: SA Recycling – Anaheim

Facility Location: 3200 E. Frontera Street, Anaheim, California 92806

Date of Inspections: June 16-18, 2021

EPA Inspectors:

1. Scott Connolly, Environmental Engineer
2. Heather Haro, Inspector
3. Daniel Haskell, Inspector

Other Attendees

1. Taylor Grose, Air Resources Engineer, California Air Resources Board
2. Elio Torrealba, Corporate Environmental Manager, SA Recycling
3. Daniela Tanzarelli, EHS Manager
4. Omar Bravo, General Manager, SA Recycling
5. Moises Figueroa, Regional General Manager, SA Recycling
6. Terry Adams, Director, SA Recycling

7. Jeff Ferrana, Counsel, SA Recycling
8. Sarai Rios, Air Permit Writer, South Coast Air Quality Management District (SCAQMD)
9. Todd Iwata Air Quality Supervisor, (SCAQMD)
10. Hugh Brown, Project Manager, Montrose Environmental Services
11. Joe Rubio, Project Manager, Montrose Environmental Services
12. Dominic Hederio, Senior Technician, Montrose Environmental Services

Contact Email Address: Elio Torrealba: etorrealba@sarecycling.com

Purpose of Inspection: To conduct emissions testing as required by EPA's May 8, 2020 Information Request and to determine compliance with the Clean Air Act.

Facility Type: Metal Shredding and Recycling Facility

Day 1: Wednesday, June 16, 2021

Arrival Time: 6:40 am

Departure Time: 12:20 pm

Day 2: Thursday, June 17, 2021

Arrival Time: 5:45 am

Departure Time: 1:30 pm

Day 3: Friday, June 18, 2021

Arrival Time: 6:30 am

Departure Time: 10:35 am

Inspection Type:

- ☐ Unannounced Inspection
- ☒ Announced Inspection

OPENING CONFERENCE

- ☒ Credentials Presented
- ☒ CBI warning to facility provided

The following information was obtained verbally from SA Recycling inspection attendees unless otherwise noted. The opening conference started at 10:30 am on Day 1 when SCAQMD representatives arrived.

Company Ownership: The facility was previously owned and operated by Adams Steel until 2007 when the facility, started doing business as SA Recycling and created a new joint venture between Adams Steel and Sims Metal Management.

Facility and Process Description:

The facility processes industrial and post-consumer metals for recycling. Scrap metal arrives at the facility by truck. End-of-life vehicles, sheet iron, appliances, and other metal materials arrive at the facility from feeder yards and direct suppliers. Scrap metal is unloaded and roughly separated by type. Claw cranes are used to load scrap metal onto the conveyer that feeds a hammermill mega shredder, manufactured by Newell Engineering, with a capacity of 300 gross tons per hour, powered by a 7000-horsepower motor. The shredder breaks apart the metal into small pieces that can be easily sorted and transported. The shredder is equipped with a water spray system that uses a combination of recycled water from the sump pump and make up water from city water supply. Shredded scrap drops out of the hammermill into the undermill oscillator and is conveyed to magnetic roller separators. Roller magnets pull out ferrous metal from the shredded material, which is conveyed to further separators which remove out light, mostly non-metallic materials. Ferrous materials are transported to storage piles by a series of conveyors so that the metal can be loaded into ships or trucks for transport. Non-ferrous materials undergo further processing in the metal recovery plant, where metals like copper and aluminum from non-metallic materials are sorted out. Ferrous and non-ferrous shredded and sorted scrap metal is sent to the Port of Los Angeles and Long Beach for export.

Staff Interview:

The Anaheim facility receives metal from auto wreckers and scrap recycling yards, including several feeder yards owned by SA Recycling. The facility measures shredded scrap metal and non-shredded scrap metal, purchased and weighted over the truck scales, in gross tons. Air emissions from the facility are collected by two pick up points that collect emissions from the shredder enclosure. One main air emissions collection hood is located above the shredder and a second collection point is located above the conveyor exiting the shredder. Prior to the test and inspection, the facility replaced parts of the enclosure that had holds or gaps to improve capture system integrity. The top of the enclosure that is attached to the hood is composed of heavy gauge steel plate to reduce maintenance and the rest of the enclosure that is not attached to another building is composed of lighter sheet steel and rubber sheeting. The collected emissions are routed through a four-stage filter house, regenerative thermal oxidizer (RTO) and caustic scrubber with attached stack. SA Recycling maintains a bypass on the whole control system including several abort gates and a lower explosive limit (LEL) monitor, set to 10% of the LEL to protect the equipment from damage if an explosion were to occur.

The current RTO system was installed in 2010 and previously the shredder was equipped with a smaller similar air emissions control system. The RTO established compliance at a minimum temperature of 1450 degrees fahrenheit, but the facility created a set point above 1600°F to account for changes in system conditions. The RTO filter media is replaced every 3-5 years and was last replaced in April 2021. The RTO and caustic scrubber were last tested for control efficiency in 2014.

The facility requires certain vendors to remove refrigerant prior to arrival at the facility and requires these vendors to renew these contracts yearly. For all other vendors SA Recycling uses a scale ticket to identify units requiring refrigerant recovery. All refrigerant containing materials, including cars and appliances are recovered on site.

TOUR INFORMATION

EPA toured the facility: Yes

Data Collected and Observations:

All test runs over all days on testing were conducted at the maximum feed rate and used a ratio of 50 percent infeed of cars and 50 percent of infeed light iron. Enough scrap metal was stockpiled prior to testing to complete test runs on Day 1, but scrap metal arriving during the day was relied upon for testing on Day 2 and Day 3. The testing was conducted using an estimated air flow rate of 32,000-35,000 standard cubic feet per minute.

Day 1:

On Day 1, Montrose conducted VOC emissions testing using EPA Methods 25A and 18. Prior to the start of the first test methane calibration was conducted using span gas from 0 to 3000 ppm and a low calibration from 0 to 1000. The start of Run #1 started at 6:43 am and concluded at 7:43 am. Gas samples for Method 18 were collected with time integrated 6-liter Summa canisters. The hydrocarbon concentration during Run #1 and Run #2 generally fluctuated between 400 and 700 ppm with drops below 200 ppm and spikes above 1000 ppm. Uncorrected Run #2 average hydrocarbon concentration was 613 ppm. Run #2 started at 8:00 am and ended 9:45 am but the test was paused between 8:35 am and 9:20 am to clear blockage. Run #3 was conducted during the opening conference, approximately 10:00am to 11:00am. Run #3 experienced a blockage that resulted in the test being paused for seven minutes and the run was extended to account for the downtime.

Day 2:

On Day 2, Montrose conducted mercury emissions testing using EPA Method 101A using a mercury sorbent trap. The shredder started operating at 5:00 am and Run #1 started at 5:25 am and ended at 7:25 am. All the mercury test runs were each conducted with 2-hour test runs and no downtime. Runs #2 and #3 started at 7:45 and 10:00 am.

Day 3:

On Day 3, Montrose conducted particulate matter and metals emissions testing using EPA Method 5 and 29. Metal emission test runs were conducted using 90-minute test runs due to lack of scrap metal to conduct two-hour test runs. Run #1 started at 5:18 am and concluded at 6:48 am. Run #2 started at 7:08 am but had a jam in the shredder at 7:18 am that caused the test to be paused until 8:10 am. A crack in the metals collection impinger #2, containing the 5% nitric acid solution, was observed after the completion of Run #2, but it was not obvious if any leaking had occurred. Less than 100 mL of rinse solution was used on the impingers because the testing contractor believes that a quality rinse can be achieved with less solution and more solution dilutes the sample and can cause detection limit issues with low concentration samples. A break between test runs #2 and #3 of about an hour was planned in order to accumulate enough scrap for the entire test run.

Photos: were taken during the inspection.

A photo log is contained in Appendix A.

Field Measurements: were taken during this inspection.

- Field Measurements were taken by Montrose stack testers during required on-site emissions testing. The following methods were used to take field measurements:
 - EPA Method 1 – Sample and Velocity Traverses
 - EPA Method 2 – Velocity Measurement with S-type Pitot
 - EPA Method 3 – Determination of Molecular Weight
 - EPA Method 4 – Determination of Moisture Content
 - EPA Method 5 – Particulate Matter Measurement
 - EPA Method 18 – Volatile Organic Compounds by Gas Chromatography
 - EPA Method 25A – Gaseous Organic Concentration by Flame Ionization
 - EPA Method 29 – Metals Emissions from Stationary Sources
 - EPA Method 101A – Determination of Particulate and Gaseous Mercury Emissions

RECORDS REVIEW

1. EPA 608 & 609 Refrigerant Annual Compliance Contract
2. Orphan Form 1459 Appliances
3. EPA 608 & 609 Compliance Certificate Vehicles

CLOSING CONFERENCE

The closing conference was conducted at 10:05 am on Day 3. Closing conference attendees included Scott Connolly, Elio Torrealba, Daniela Tanzarelli, Omar Bravo, Moises Figueroa, and Jeff Ferrana. SA Recycling will submit the final emissions testing report within 60 days of the test, as required by EPA's information request.

Requested documents:

- EPA 608 & 609 Refrigerant Annual Compliance Contract
- Orphan Form 1459 Appliances
- EPA 608 & 609 Compliance Certificate Vehicles
- Emissions Test Report

Compliance Assistance: SA Recycling should repair the broken line on the packed bed scrubber and should replace the missing solution indicator.

SIGNATURES

Report Author: Connolly, Scott Digitally signed by Connolly, Scott
Date: 2021.08.17 10:58:10 -07'00' Date: _____

Section Chief: _____ Date: _____

Facility Name: SA Recycling – Anaheim

Facility Location: 3200 E. Frontera Street, Anaheim, California

Date of Inspection: June 16-18, 2021

APPENDICES AND ATTACHMENTS

I. Appendix A: Digital Image Log

Facility Name: SA Recycling – Anaheim
Facility Location: 3200 E. Frontera Street, Anaheim, California
Date of Inspection: June 16-18, 2021

APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: Scott Connolly	2. Date of Inspection: June 16-18, 2021
3. Company/Facility Name: SA Recycling – Anaheim	4. Street Address, City, State: 3200 E. Frontera Street, Anaheim, California
5. Number of Images: 25 photos	6. Archival Record Location: Photos are located on the attached CD labelled “SA Recycling Terminal Island Inspection Photos”

Image Number	File Name	Date and Time	Description of Image
1	P6170194.JPG	6/17/2021 6:06	Shredder exit conveyor, capture system duct, and stack testing platform
2	P6170195.JPG	6/17/2021 6:44	RTO abort gate and emergency bypass
3	P6170196.JPG	6/17/2021 6:54	Refrigerant recovery equipment for appliances
4	P6170197.JPG	6/17/2021 6:54	Refrigerant recovery tanks
5	P6170198.JPG	6/17/2021 6:54	R22 refrigerant cylinder
6	P6170199.JPG	6/17/2021 6:54	R410 refrigerant cylinder
7	P6170200.JPG	6/17/2021 7:04	Refrigerant recovery of a refrigerator
8	P6170201.JPG	6/17/2021 7:12	Refrigerant recovery equipment for vehicles
9	P6170202.JPG	6/17/2021 7:13	Refrigerant recovery from vehicle
10	P6170203.JPG	6/17/2021 7:37	Shredder scrap pile
11	P6170204.JPG	6/17/2021 7:37	Shredder scrap pile and shredder building
12	P6170205.JPG	6/17/2021 8:53	Nonferrous building entrance
13	P6170208.JPG	6/17/2021 9:51	Changeover of sample trains from run 2 to run 3
14	P6170209.JPG	6/17/2021 10:11	Run 2 spent silica impinger
15	P6170210.JPG	6/17/2021 11:30	Scrap pile during Run #3
16	P6170211.JPG	6/17/2021 11:40	Scrap pile during run #3 after several trucks arrived
17	P6170212.JPG	6/17/2021 12:15	RTO quenchers
18	P6170213.JPG	6/17/2021 12:17	RTO canisters
19	P6170214.JPG	6/17/2021 12:17	RTO chamber
20	P6170215.JPG	6/17/2021 12:21	Packed bed scrubber
21	P6180216.JPG	6/18/2021 8:22	Shred pile during Method 29 run #2
22	P6180217.JPG	6/18/2021 9:00	Shred pile during Method 29 Run #2
23	P6180218.JPG	6/18/2021 9:50	Method 29 Run #3 sample train prior to testing
24	P6180219.JPG	6/18/2021 9:51	PM and Metals testing Run #2 filter after test run
25	P6180220.JPG	6/18/2021 9:56	PM and Metals testing Run #2 silica impinger after run completion